

CLAIMS

1. A connection device for a tire-building drum for connecting a center shaft of the tire-building drum to a drive shaft on a building machine body side, wherein, at shaft ends of both the shafts to be brought into contact with each other, there are provided form-locking portions to be fitted with each other, one end of a cylindrical member is disposed by screwing to a head portion of the drive shaft, and a plurality of cam rollers rotatable around the center axis oriented in the radial direction are attached, with an interval in the circumferential direction, on the inner circumferential surface of the other end of the cylindrical member,

a flange pressed by the cam rollers toward the drive shaft side under a tightening displacement of the cylindrical member is provided at the end portion of said drum center shaft, and cutout portions are provided at said flange for preventing interference of the cylindrical member with the cam rollers before said tightening displacement.

2. A connection device for a tire-building drum according to claim 1, wherein the drive shaft and the cylindrical member are screwed with trapezoidal screws.

3. A connection device for a tire-building drum according to claim 1 or 2, wherein a high-hardness metal plate is disposed at least at a portion of said flange in contact with the cam rollers.

4. A connection device for a drum-building drum for connecting a center shaft of the tire-building drum to a drive shaft on a building machine body side, wherein, at shaft ends of each of both the shafts, there are provided contact flanges and form-locking portions adapted to be fitted with each other, on each of the contact flanges, there is provided an inclined surface having a thickness which decreases gradually radially outwards from the disposed shaft side of the flange, and

on a hinged clamp made of a pair of arcuate members disposed around both the contact flanges in the mutually contact state over both the flanges, there is provided a tapered sidewall groove in contact with

both the inclined surfaces of the respective contact flanges.

5 5. A connection device for a tire-building drum according to claim 4, wherein a surface contact can be made between the inclined surfaces of the respective contact flanges and the tapered sidewall of the hinged clamp.

10 6. A connection device for a tire-building drum according to any one of claims 1 to 5, wherein a surface contact can be made between the drum center shaft and the drive shaft at each of the form-locking portion and the contact portion around the form-locking portion.

15 7. A connection device for a tire-building drum according to any one of claims 1 to 6, wherein at a contact portion between the drum center shaft and the drive shaft, there is provided a relative-rotation restricting means for those shafts.